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ABSTRACT

Programs funded through the federal Carl D. Perkins Vocational and Applied Technology Education Act sex equity set aside are required to provide occupational education in high wage, high skill, and nontraditional careers. This bulletin, one of a series reporting on Perkins Act funding in New Jersey, reports on the effectiveness of displaced homemaker and sex equity programs with regard to the change in knowledge of participants concerning nontraditional careers. Nontraditional careers are defined as careers dominated by 75% or more of one gender. Data were collected from 179 participants in displaced homemaker and sex equity programs in New Jersey during program year 1995 using a Technical Careers Survey as pretest and posttest. The majority of the sample, 89.1% of participants, were females, with 41.1% identifying themselves as Caucasian. Responses showed significant increases between mean pre- and posttest scores, even though mean posttest scores reflected low levels of correct responses. The increase was significant for 6 of 10 age groups analyzed, but all groups did at least show increased knowledge. Increased knowledge is an important component of providing occupational opportunities for participants. It is recommended that women need continuing increases in knowledge of nontraditional careers. Programs operating with Perkins Act sex equity set aside funds have demonstrated the ability to increase knowledge of non-traditional careers. These programs should be continued and expanded so that more participants can benefit from them. (Contains 4 figures and 9 references.) (SLD)

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RESEARCH BULLETIN

NEW JERSEY
CAREER EQUITY ASSISTANCE CENTER FOR RESEARCH AND EVALUATION

Fall, 1995 LIFE SKILLS CENTER, MONTCLAIR STATE UNIVERSITY Research Bulletin No. 11

TECHNICAL CAREERS: CHANGES IN LEVELS OF KNOWLEDGE

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The Office of Bilingual Education and Equity Issues, New Jersey Department of Education, through funding from the Carl D. Perkins Act sponsors single parent/displaced homemaker and sex equity programs throughout the state. As one component of an on going evaluation, program participants take a series of pre and post tests. The results are analyzed independently by the Career Equity Assistance Center for Research and Evaluation at Montclair State University (CEAC). This bulletin represents one in a series of four reports on test results obtained during Program Year 1995. Other bulletins present results of testing for self esteem, equity standards and sex role stereotypes.

PROGRAM PARTICIPANTS INCREASE KNOWLEDGE OF NONTRADITIONAL CAREERS

Programs funded through the federal Carl D. Perkins Vocational and Applied Technology Education Act, P.L. 101-392 sex equity set aside, are required to provide occupational education in high wage, high skill and nontraditional areas. Lack of knowledge about careers limits entry into occupations which could be both personally and financially rewarding to both females and males.

Programs offered through the Perkins Act sex equity set aside in New Jersey are consistent with the *Strategic Plan for Systemic Improvement of Education in New Jersey*. One of the most relevant relationships between the Strategic Plan and the Perkins Act programs pertains to identifying corrective actions to address educational inequities resulting from gender discrimination. Programs designed to increase knowledge of nontraditional careers are addressing economic disparity based on gender.

This bulletin reports the effectiveness of displaced homemaker and sex equity programs funded by the Perkins Act with regard to the change in knowledge of participants concerning nontraditional careers. In New Jersey, these programs are administered by the Office of Bilingual Education and Equity Issues of the New Jersey Department of Education.

WD030914

REVIEW OF LITERATURE

Nontraditional careers are defined as any career dominated by 75 percent or more of one gender. In general, careers dominated by men pay higher salaries and are considered to be of higher status than those traditionally held by women. In order to experience the rewards of a career both financially and psychologically, women and men need to engage in a wider variety of careers.

The status associated with career opportunities is transmitted to children at an early age. Classifications of occupations as "male" or "female" by students can be measured as early as kindergarten (Teglasi, 1981; Weisner and Wilson-Mitchell, 1990). When asked to select the "best" jobs, the choices of elementary students corresponded more closely to the masculine than to the feminine stereotypes (Teglasi, 1981).

In New Jersey, women continue to be concentrated in low wage jobs. Women account for 67.2% of all low wage workers. Of the females in the work force, 54.5% held low wage jobs compared to 29% low wage earners in the male work force (Life Skills Center, 1992). The Institute for Women's Leadership (1993) reported that in 1990, 68% of New Jersey women worked in gender-segregated clerical, service and sales jobs, earning less, with fewer benefits, status and security than "men's" jobs.

Although lack of information has been cited as a barrier to entry into nontraditional careers, research on the knowledge of young women in this area has been limited (Yanico and Hardin, 1986). High school students have been reported to perceive lack of knowledge as a barrier to entering nontraditional careers (McLure and Piel, 1978). Bernstein, Reilly and Coté-Bonanno (1992) found that knowledge about nontraditional careers was significantly related to age, type of school, parental status, marital status, race and mother's and father's occupation.

A strong relationship has been found between knowledge of nontraditional careers and attitudes toward them (Bernstein, Reilly and Coté-Bonanno, 1992). Students who were most knowledgeable were most likely to be nontraditional in their attitudes.

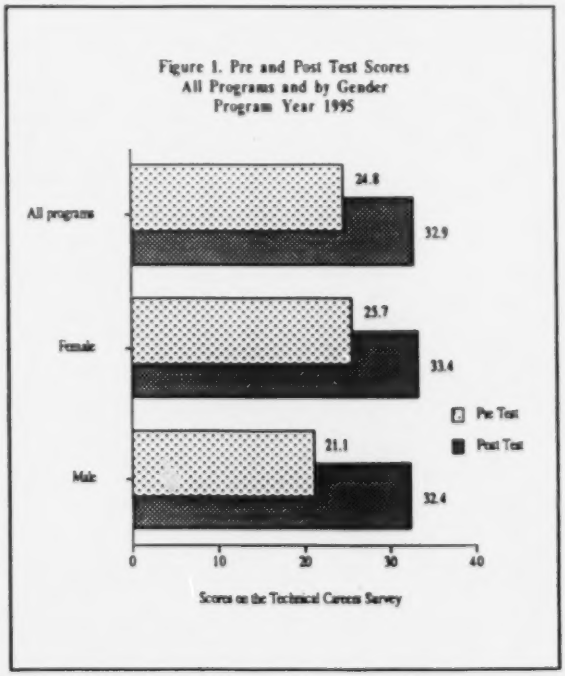
Although programs to change attitudes and behaviors toward nontraditional careers have not always been successful, the Achieving Sex Equity Through Students (ASETS) training intervention has produced significant changes in attitudes of high school students toward women in nontraditional careers (Coté-Bonanno, 1994; Mitchell, 1994). During Program Year 1994, projects funded by the Perkins Act sex equity set aside funds in New Jersey successfully increased knowledge of participants from all projects, by gender, for ages 12-16 years and for most types of schools attended (Bernstein, Coté-Bonanno, Reilly, Carver and Doremus, in press).

METHOD OF STUDY

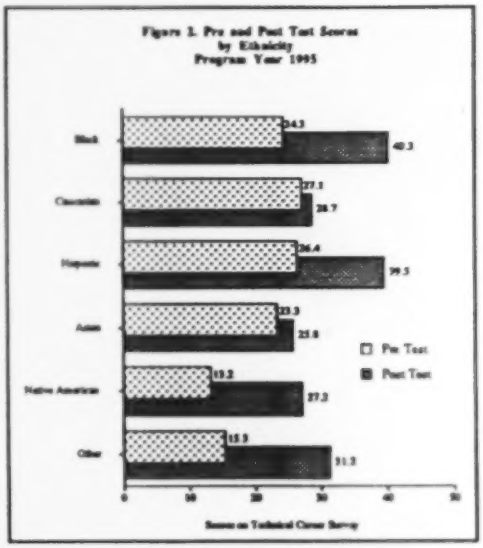
Data was collected from clients enrolled in displaced homemaker (DHSS) and sex equity programs throughout New Jersey during the Program Year 1995. Matched pre and post tests were collected from 179 program participants.

The Technical Careers Survey was developed specifically for use in single parent/displaced homemaker and sex equity programs in New Jersey. The survey consists of a set of 3 questions for each of 20 occupations. The questions pertain to where training can be obtained, the entry wage level and the gender appropriateness for each occupation. All 60 questions were scored together and combined to produce a single score.

Figure 1. Pre and Post Test Scores
All Programs and by Gender
Program Year 1995



Survey forms were administered to all clients prior to the beginning of any program. Post tests were administered six weeks after the completion of that part of the program pertaining to non-traditional careers. Completed tests were scored by program personnel and the results forwarded for analysis to the CEAC at Montclair State University.



FINDINGS

The majority of the sample (89.1%) were females. Participants ranged from 12 years of age to over 46 years of age. The largest percentage of the respondents, 34.9%, were between 18 and 25 years of age. The largest portion of the respondents, 41.1%, classified themselves as Caucasian. The second and third largest groups were respondents who classified themselves as Black, 23.3% and as Hispanic, 16.5%. Clients from the DHSS programs were the largest group participating in the survey, 41.8%. Other groups represented included: ASETS students, 11.8%; students, 30.0%; and teen parents, 16.4%.

Mean test scores were significantly higher on the post test than on the pre test for all participants combined and for males and females when analzyed separately. Mean test scores for males were considerably lower than for females on the pre test. Although the change in score between the pre test and the post test was greater for males than for females, the mean post test score for males was still slightly lower than the mean post test score for females (see Figure 1).

Mean post test scores for all projects reflect a correct response rate of 54.8%. The correct response rate on the mean post test scores was slightly higher for females (55.7%) than for males (54.0%).

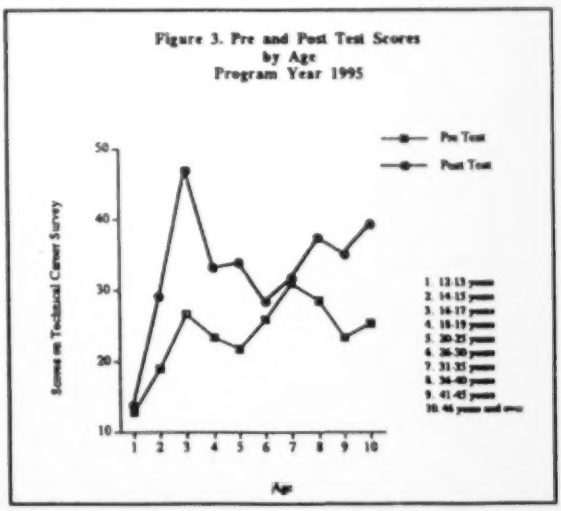
Mean post test scores were significantly higher than mean pre test scores for respondents who classified themselves as Black, Hispanic or Other. Mean post test scores were also higher than mean pre test scores for respondents who classified themselves as Caucasian, Asian or Native American, but these changes were not significant.

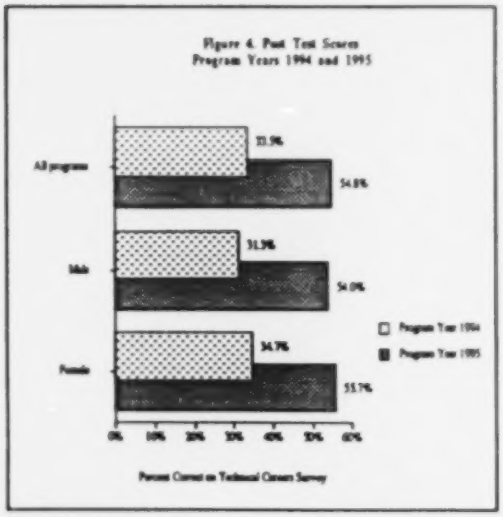
Black respondents had the highest mean post test score (M40.3) followed by Hispanic respondents (M39.5). The largest difference between the mean pre test score and the mean post test score was for respondents who classified themselves as Other (see Figure 2).

The mean post test scores were significantly higher than mean pre test scores for six of the ten age ranges analyzed. Significant changes between the mean pre and post test scores were found for respondents who were 14-15 years of age, 18-19 years of age, 20-25 years of age, 36-40 years of age, 41-50 years of age and 46 years of age and over. Respondents in the 16-17 year age range had the highest mean post test score (M47.0). Other age ranges with high mean post test scores were those 46 years of age and over (M39.3), 36-40 years of age (M37.3) and 41-15 years of age (M35.1). Respondents in the 12-13 year age range had the lowest mean post test score (M13.8). See Figure 3 for a comparison of scores on the Technical Careers Survey by age .

DISCUSSION

As reported previously (Bernstein, et al., in press), programs funded un-





der the Perkins Act sex equity set aside funds showed significant increases between mean pre and post test scores for Program Year 1994. However, mean post test scores reflected low levels of correct responses. The mean percent correct was higher in Program Year 1995 than in Program Year 1994 for participants from all programs combined and for both males and females when these were analyzed separately (see Figure 4).

Although the increase in the mean post test score was not significant for all age ethnic groups during Program Year 1995, all groups did show an increase. Because of the strong relationship previously found between knowledge of nontraditional careers and attitudes toward them (Bernstein, Reilly and Coté-Bonanno, 1992), increased knowledge is an important component in providing occupational opportunities to participants in displaced homemaker and sex equity programs.

RECOMMENDATIONS

Since women in New Jersey continue to be employed in low wage jobs (Life Skills Center, 1992) and in gender segregated jobs (Institute for Women's Leadership, 1993), women need continuing increases in knowledge of nontraditional careers. Programs operating with Perkins Act sex equity set aside funds have demonstrated the ability to increase knowledge of nontraditional careers.

Sex equity programs should be continued and expanded so that more participants can benefit from them. The wide range of opportunities and services offered by these programs include:

- ✔ **ASETS (Achieving Sex Equty Through Students) workshops,**
- ✔ **Saturday workshops that focus on nontraditional careers,**
- ✔ **role model panels and**
- ✔ **life skills programs, such as New Beginnings.**

At a time when New Jersey's educational system is emphasizing the importance of gender equity by its inclusion in the *Strategic Plan for Systemic Improvement of Education in New Jersey*, the continuation and expansion of the sex equity set aside programs is of particular importance.

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